

REMARKS

Applicant has studied the Office Action dated September 8, 2006 and believes the application is in condition for allowance. Claims 1-14 and 16-20 are pending. Claims 1, 8 and 16 are independent claims.

It is submitted that the application is in condition for allowance. Reconsideration and reexamination are respectfully requested.

§ 103 Rejections

Claims 1, 3, 8, 9, 11, and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang et al. ("Chiang" U.S. Patent No. 6,876,331) in view of Daniels (U.S. Pat. No. 5,335,366). This rejection is respectfully traversed.

The Federal Circuit has provided that an Examiner must establish a case of prima facie obviousness. Otherwise the rejection is incorrect and must be overturned. As the court recently stated in In re Rijkaert, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993):

"In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant. 'A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.' If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned." (citations omitted.)

It is respectfully noted that the Examiner indicates, at page 3 of the Office action, that Chiang "does not specifically state partially reflects the electromagnetic waves automatically when the mobile communication terminal is in use in a direction opposite to the head of the user" and further asserts that Daniels cures the deficiencies of Chiang with respect to independent claims 1 and 8, which recite a second antenna at least partially reflects the electromagnetic waves automatically when the mobile communication terminal is in use. Applicant respectfully disagrees with the Examiner's assertion of the combination of Chiang and Daniels.

It is well-settled that a reference must provide some motivation or reason for one skilled in the art (working without the benefit of the applicants' specification) to make the necessary changes in the disclosed device. The mere fact that a reference may be modified in the direction of the claimed invention does not make the modification obvious unless the reference expressly or impliedly teaches or suggests the desirability of the modification. In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984); Ex parte Clapp, 227 USPQ 972, 973 (Bd. App. 1985); Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. App. 1984).

It is respectfully noted that Chiang is directed to "considerations [that] should be taken into account when designing an antenna for a hand-held wireless device," such as "mechanical characteristics to satisfy the needs of a typical user," "an aesthetically pleasing appearance" and problems such as "multipath fading" and "inter-cell interference" in order to "maximize antenna performance, while minimizing size and manufacturing complexity." Col. 2, line 12 to col. 3, line 67. It is submitted that none of the disclosed "considerations" are related to "reducing the effects on the human body of electromagnetic waves emitted from the terminal" by substantially reducing "the amount of electromagnetic waves that are absorbed by the human body" and "specifically away from the head," as is the present invention. Specification at paragraphs 0002, 0013 and 0034.

It is further respectfully noted that the only disclosure in Chiang related to the body of the user is to reduce the effects of the body on signals transmitted from the "handset" by "localiz[ing] current or near fields of the antenna elements toward the base of the antenna elements" such that "negative performance effects imposed by the human hand holding the handset or the body of the handset or the body of the handset itself can be reduced." Col. 4, ll. 38-43. It is respectfully submitted that the present invention is directed to reducing the effects of the transmitted signals **on the user's body** while Chiang is directed to reducing the effects **of the user's body** on the transmitted signals. It is further respectfully submitted that the disclosure in Chiang to localize "current or near fields of the antenna elements toward the base of the antenna elements" would actually cause a user to be subjected to **more** electromagnetic waves

by directing those waves in the **same** direction of the head of the user, given the disclosed location of the "base of the antenna elements at the top or bottom of the "housing 110" as illustrated in FIGS. 1A, 1B, 1C, 2 and 8 since the "housing 110" would be next to the user's head when the "cellular handset 100" is in use.

It is respectfully noted that the Examiner asserts, at page 3 of the Office action, that "Chiang et al. teaches ... a second antenna 104 (figure 1) ... such that the second antenna at least partially directs electromagnetic waves emitted from the first antenna (i.e. the antennas can be passive or directive)" and specifically cites to "column 6 lines 12-18, column 9, lines 3-20, column 5 line 59 [to] column 6 line 5, column 7 lines 3-10" of Chiang. Applicant respectfully disagrees with the Examiner's interpretation of Chiang and respectfully asserts that Chiang teaches away from the asserted modification by the teachings of Daniels.

It is respectfully noted that Chiang discloses that "[e]ach of the passive elements 104 can be operated in a **reflective** or directive mode" and "the passive element 104a operates in a reflective mode" which "results in Radio Frequency (RF) energy being reflected back from the passive element 104a towards its source" and "passive element 104a essentially is invisible to the propagating RF energy which passes therethrough" when "the passive element operates in a directive mode." Col. 6, line 54 to col. 7, line 15 (emphasis added). It is further respectfully noted that Chiang discloses the advantages of being able to operate the "passive elements 104" in either the "directive mode" or the "reflective mode." Col. 8, ll. 18-44 and FIGS. 5A through 5D. Moreover, it is respectfully noted that the disclosure in Chiang of "passive elements" operating in a "reflective mode" or "reflective state" is with regard to a "switch" that is used to select between a "directive mode" or "directive state" and a "reflective mode" or "reflective state." Col. 4, ll. 24-31 and col. 7, ll. 23-31.

In view of the disclosure in Chiang, it is respectfully submitted that Chiang discloses that some action by a user is required to place the "passive elements" in a "reflective mode" or "reflective state" and the ability of the "passive elements" to be in the "reflective mode" at times and in the "directive mode" at other times is essential to the invention. It is further respectfully submitted that the Examiner's asserted

modification of the Chiang invention by the teachings of Daniels to attain the recited second antenna that at least partially reflects the electromagnetic waves automatically would be contrary to the teachings of Chiang since the modification would require that the Chiang "switch" be permanently in the position that selects the "reflective mode" and preclude use of the "directive mode."

The Examiner bears the burden of establishing the existence of either 1) some objective teaching in the prior art or 2) knowledge generally available to one of ordinary skill in the art which would lead that individual to change the primary reference. In re Jones, 21 USPQ2d 1941, 1943-44 (Fed. Cir. 1992). Section 103 does not allow the Examiner to engage in a picking and choosing from the prior art only to the extent that it will support a holding of obviousness, while excluding parts of the prior art essential to the full appreciation of what the prior art suggests to one of ordinary skill in the art. In re Wesslau, 147 USPQ 391 (CCPA 1975). As the CAFC has said, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. ACS Hospital Systems v. Montefiore Hospital, 221 USPQ 929, 933 (Fed. Cir. 1984).

The Federal circuit has consistently held that hindsight reconstruction does not constitute a prima facie case of obviousness under 35 U.S.C. § 103. In re Geiger, 2 USPQ2d 1276 (Fed Cir. 1987). Indeed, it is not proper under 35 U.S.C. 103 to modify a prior art patent in a manner which would destroy that on which the invention of the prior art patent was based. Ex parte Hartman, 186 USPQ 366, 367 (PTO Bd. App. 1974).

It is respectfully submitted that Chiang invention, as specifically detailed therein, includes the provision that the "passive elements" be selectively in either the "directive mode" or the "reflective mode." It is further respectfully submitted that if Chiang were modified in the manner proposed by the Examiner, it would no longer include the feature that the "passive elements" be selectively in either the "directive mode" or the "reflective mode," thereby destroying that on which the invention of the [Chiang] patent was based. Moreover, it is respectfully submitted that **any** modification of the Chiang invention such that the second antenna at least partially reflects electromagnetic waves automatically would destroy the Chiang invention.

Therefore, it is respectfully submitted that the proposed modification is improper under the Code. It is further respectfully submitted that in view of the lack of motivation for one of ordinary skill in the art to make the modification to the Chiang invention asserted by the Examiner, the only motivation for the asserted modification is impermissible "hindsight" based on the disclosure in the present specification.

Therefore, it is respectfully asserted that independent claims 1 and 8 are allowable over the asserted combination of references. It is further respectfully asserted that claim 3, which depends from claim 1, and claims 9, 11 and 12, which depend from claim 8, also are allowable over the asserted combination of references.

Claims 2, 4, 10 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang in view of Daniels and further in view of Bauregger et al. ("Bauregger" U.S. Publication No. 2003/0214443). This rejection is respectfully traversed.

It is respectfully submitted that Bauregger fails to cure the deficiencies of Chiang and Daniels with respect to a second antenna at least partially reflects the electromagnetic waves automatically when the mobile communication terminal is in use, as recited in independent claims 1 and 8. Therefore, it is respectfully asserted that claims 1 and 8 are allowable over the cited combination of references. It is further respectfully asserted that claims 2 and 4, which depend from claim 1, and claims 10 and 13, which depend from claim 8, also are allowable over the cited combination of references.

Claims 5 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang in view of Daniels and further in view of Shiraki et al. ("Shiraki" U.S. Publication No. 2001/0024944). This rejection is respectfully traversed.

It is respectfully submitted that Shiraki fails to cure the deficiencies of Chiang and Daniels with respect to a second antenna at least partially reflects the electromagnetic waves automatically when the mobile communication terminal is in use, as recited in independent claims 1 and 8. Therefore, it is respectfully asserted that claims 1 and 8 are allowable over the cited combination of references. It is further respectfully asserted that claim 5, which depends from claim 1, and claim 14, which depends from claim 8,

also are allowable over the cited combination of references.

Claims 6, 7, 16 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang in view of Daniels and further in view of Katagishi et al. ("Katagishi" U.S. Publication No. 2004/0063476). This rejection is respectfully traversed.

It is respectfully submitted that the Examiner has not established the required motivation to modify the Chiang invention as modified by Daniels by the teachings of Katagishi. It is further respectfully submitted that Katagishi teaches away from the asserted combination of references.

As was previously respectfully noted in the response to the Office action issued March 20, 2006, the only motivation given by the Examiner for the modification of the Chiang invention as modified by Daniels by the teachings of Katagishi is provided at page 7 of the Office action, where the Examiner asserts that Katagishi is "in the same field of endeavor" and the combination would "improve [the] design and ergonomics of the mobile terminal." As was previously respectfully submitted in the response to the Office action issued March 20, 2006, there is no motivation provided by Chiang or Katagishi to "improve the ergonomics" of the Chiang mobile communication handset. It is further respectfully submitted that Daniels also fails to provide this motivation.

Therefore, it is respectfully asserted that the only motivation upon which the Examiner has relied to modify the Chiang invention as modified by Daniels by the teachings of Katagishi is the teachings of the present specification and, therefore, has engaged in impermissible "hindsight reconstruction."

It is respectfully noted that that the Examiner has failed to address the Applicant's previous submission that the asserted combination of references is improper. It is respectfully requested that the Examiner either withdraw the rejection or provide the proper indication of motivation for the asserted modifications in the Chiang, Daniels or Katagishi references.

As was previously respectfully noted in the response to the Office action issued March 20, 2006, independent claim 16 recites that the first antenna is adapted to be withdrawn from the main body and the second antenna is attached to the foldable

portion or, in other words, that the first antenna and second antenna are located on **different** portions of the mobile communication terminal and that the second antenna automatically reflects electromagnetic waves emitted from the first antenna when the terminal is in use, or in the open configuration. As was further previously respectfully noted in the response to the Office action issued March 20, 2006, the only configuration disclosed in Katagishi in which "antenna 4" and "antenna 5" are located on **different** " housings" of the mobile communication terminal is the "fourth embodiment" of FIG. 5, which is disclosed in paragraphs 0033 and 0034. However, as was previously further respectfully noted in the response to the Office action issued March 20, 2006, Katagishi discloses "the positions of the antennas are separated from each other" in the "fourth embodiment" such that the configuration "suppresses interaction between the antennas."

Notwithstanding that there is insufficient motivation to modify the Chiang invention as modified by Daniels with the teachings of Katagishi, as was previously respectfully noted in the response to the Office action issued March 20, 2006, Katagishi teaches away from the combination by teaching to "suppress" interaction between the antennas, while Chiang, as asserted by the Examiner at page 8 of the Office action, teaches interaction between the antennas in that "the second antenna directs electromagnetic waves emitted from the first antenna when the terminal is in use. Therefore, as was previously respectfully submitted in the response to the Office action issued March 20, 2006, even if the Chiang invention were modified by the teachings of Katagishi, the combination would **not** produce a first antenna that is adapted to be withdrawn from the main body and a second antenna that is attached to the foldable portion wherein the second antenna automatically reflects electromagnetic waves emitted from the first antenna when the terminal is in use. It is further respectfully submitted that Daniels fails to cure this deficiency of Katagishi.

It is respectfully noted that that the Examiner has failed to address the Applicant's previous submission that the asserted combination of references fails to teach all the limitations of independent claim 16. It is respectfully requested that the Examiner either withdraw the rejection or provide additional details regarding how the asserted

combination of references teach all the limitations of independent claim 16.

Notwithstanding that the combination of Chiang, Daniels and Katagishi is improper, it is respectfully submitted that Katagishi fails to cure the deficiencies of Chiang and Daniels with respect to a second antenna at least partially reflects the electromagnetic waves automatically when the mobile communication terminal is in use, as recited in independent claim 16. Therefore, it is respectfully asserted that independent claims 1 and 16 are allowable over the cited combination of references. It is further respectfully asserted that claims 6 and 7, which depend from claim 1, and claim 18, which depends from claim 16, also are allowable over the cited combination of references.

Claims 17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang in view of Daniels and further in view of Katagishi and in further view of Bauregger. This rejection is respectfully traversed.

It is respectfully submitted that Katagishi and Bauregger fail to cure the deficiencies of Chiang and Daniels with respect to a second antenna at least partially reflects the electromagnetic waves automatically when the mobile communication terminal is in use, as recited in independent claim 16. Therefore, it is respectfully asserted that claim 16 is allowable over the cited combination of references. It is further respectfully asserted that claims 17 and 19, which depend from claim 16, also are allowable over the cited combination of references.

Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang in view of Daniels and further in view of Katagishi and in further view of Shiraki. This rejection is respectfully traversed.

It is respectfully submitted that Katagishi and Shiraki fail to cure the deficiencies of Chiang and Daniels with respect to a second antenna at least partially reflects the electromagnetic waves automatically when the mobile communication terminal is in use, as recited in independent claim 16. Therefore, it is respectfully asserted that claim 16 is allowable over the cited combination of references. It is further respectfully asserted that claim 20, which depends from claim 16, is allowable over the cited combination of references.

CONCLUSION

In light of the above remarks, Applicant submits that the claims 1-14 and 16-20 of present application are in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California, telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

Lee, Hong, Degerman, Kang & Schmadeka

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Customer No. 035884

By: 

Richard C. Salfelder
Registration No. 51,127
Attorney(s) for Applicant(s)